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EIGHT PAGES.

CLINICS.

*Statistical Report of the Principal Opera-
tions Performed in the London Hospitals
during August, 1853.*—The subjoined re-
port comprises, it is believed, all the more
important operations performed, during the
month of August, at the following hospitals: Uni-
versity College, King's College, St. George's, St.
Bartholomew's, Guy's, St. Thomas's, the Middlesex, the London, the
Westminster, Charing-cross, St. Mary's, and the Metropolitan Free.

Lithotomy.—Number of cases, 5; of
which 4 have recovered, and 1 is progress-
ing favourably under treatment.

Lithotrity.—Number of cases, 1. The
patient remains under care, and is suffering
from cystitis. The case reported last month
as under the care of Mr. Avery, in Char-
ing-cross Hospital, has since been dis-
charged, and there is reason to believe that
no part of the calculus now remains in the
bladder.

Herniotomy.—Number of cases, 11; re-
covered, 5; under treatment, 1; died, 7.
In but one of these was the sac not opened.
The patient was under the care of Mr. Cut-
ler, in St. George's Hospital, and recovered
well. In another, under the care of Mr.
Paget, in St. Bartholomew's Hospital, the
sac ruptured spontaneously just as the bowel
was passing up; the patient is doing well.
Of the unusual number of fatal cases, the
majority are susceptible of easy explanation.
One was an operation performed *in extremis*,
on a man who had refused to submit to it
when first proposed, and in whom there
was, in fact, some doubt as to the existence
of a stricture, as the protruded portion had
been reduced several times. A second was
an instance of umbilical hernia in the male.
In a third, although at the operation the
stricture had seemed freely divided, and the
bowel was easily returned, yet at the au-
topsy it was discovered that strangulation
had been still kept up by a band of mem-
brane within the abdomen. Death occurred

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three days after the operation, and the symptoms of strangulation, which had previously existed for thirty-six hours, persisted through that time. In a fourth, strangulation had existed *six days* before the operation. In a fifth, the hernia was very large, and had been strangulated several days before the patient's admission. The *post-mortem* showed the intestines matted together with lymph, and gangrenous in several circumscribed patches. The two cases which we reported last week as remaining under treatment have since been discharged.

Ovariotomy.—This operation has been performed once in the Metropolitan Free Hospital, by Mr. G. Borlase Childs. The major incision was adopted, and a large multilocular and thick-walled cyst removed. It required to be separated from the great omentum, to which it had contracted adhesions, and a vessel in the latter which bled had to be ligatured. After the operation, the patient, a middle-aged woman, lived nine days, during which she suffered much from diarrhoea and sickness, and took very little food. The wound, with the exception of a small portion, had united by first intention. At the *post-mortem*, peritonitis was found only around the track of the ligatures; death appeared to have resulted from exhaustion. A case operated on at this hospital, a few months ago, by Mr. Childs (the lesser incision), recovered satisfactorily, and is now quite well.

Trephining the Skull.—Number of operations, 3; 2 of which were for compound fracture with depression, and 1 for abscess between the dura mater and skull. The patient, in the latter case, had been admitted on account of a scalp wound (bone exposed), which subsequently took on phagedænic action. Symptoms of compression ensued, and the trephine was accordingly resorted to. Death occurred two days after the operation, and five weeks after the original accident. In one of the cases of compound fracture with depression, the symptoms of compression did not show themselves till the second day, when the operation was at once performed. Death took place two days later. In the third case, the operation was performed by Mr. Poland on one of the sufferers from the late accident at the Sydenham Crystal Palace, who was admitted into Guy's Hospital in a state of insensibility, and with compound

fracture of the skull and depression of the bone. The dura mater was not injured. The man recovered his consciousness soon after the operation, and has since proceeded without a single bad symptom. He may now be considered quite out of danger.

Ligation of Arteries, etc..—On a patient in King's College Hospital, who had received a stab in the forearm, probably wounding the ulnar and interosseous arteries, Mr. Partridge performed ligation of the brachial, on account of very profuse bleeding. The operation succeeded in every respect, and the patient recovered without any drawback. In St. Bartholomew's Hospital, Mr. Lloyd was obliged to perform ligation of the femoral artery for popliteal aneurism, in a case in which compression had been perseveringly tried, with, at first, much hope of success. Since the ligation, the man has done well. He is still in the hospital. The case of Mr. Le Gros Clarke's, with a similar history, which remained under treatment at the time of our last month's report, has since been discharged well. During the last month, there have been in St. George's Hospital one, and in Guy's Hospital two, cases of popliteal aneurism undergoing treatment by compression. The case in St. George's is under the care of Mr. Hewitt. The pulsations in the tumour have become much more feeble than they were at first, and the size of the whole is diminishing; pressure is still kept up, and with every prospect of a pleasing result. Both the Guy's cases are under the care of Mr. Hilton; one of them has left the hospital, the aneurism having become quite solid, and much contracted; the other remains under treatment.

Amputations.—Number of cases, 15; recovered, 1; under treatment, 13; died, 1. The case which has terminated fatally was an amputation in the upper third of the leg, on account of disease of the tarsal bones and ankle-joint. The patient was an old and irritable man, whose arteries were much diseased. Some difficulty was encountered in endeavouring to arrest the bleeding immediately after the operation, which was only accomplished by the assistance of an unusually large number of ligatures. Death took place on the sixth day, in consequence of secondary hemorrhage. The case which has recovered is one of amputation of the forearm for diseased carpus, performed by Mr. Pollock, in Saint

George's Hospital. Of the thirteen cases still under treatment, four are primary amputations, three of the forearm, and one of the arm; eight are operations performed on account of diseased joints; and one on account of a large ulcer left by a burn. Of the latter, two are amputations in the thigh, six in the leg, and one at the shoulder-joint. All the cases are progressing favourably. The details of the last may be found in the *Medical Times and Gazette* for Sept. 24. Exclusive of the above, six or seven primary amputations of considerable portions of the hand or foot have been performed; they are all recovering, or have recovered satisfactorily. Of the eight cases left under treatment by our last month's report, four have been discharged well, and the other four are proceeding satisfactorily.

Excision of Bones.—In St. Thomas's Hospital, Mr. Solly removed by operation the carious portions of the astragalus and os calcis from a diseased foot. In the Westminster Hospital, Mr. C. G. Guthrie removed two metacarpal bones, on account of strumous disease. Both these patients have progressed remarkably well, and, it is hoped, will save their respective limbs. Mr. Solly's patient is still in the hospital; Mr. Guthrie's has been sent into the country.

Removal of Necrosed Bone.—Number of cases, 10; recovered and discharged, 1. The nine remaining under treatment are all doing well. Of the eight cases under treatment at last report, three have since been discharged.

Excision of Malignant Growths.—Number of cases, 11. Of these, four have been for epithelial cancer of the lower lip, and three of the patients have been discharged well; in the fourth, the disease is already returning. One of these, in St. George's Hospital, under the care of Mr. Johnson, involved almost the entire lower lip, and required very free removal. The patient was an old man, and had, fortunately, lost all his front teeth, so that, with a little trouble, the edges of the incision were brought into apposition by means of harelip pins, which, under other circumstances, would have been impossible. A very respectable lip was formed. Another case, under the care of Mr. Le Gros Clarke, in Saint Thomas's Hospital, differed from what is usual, in that the patient was a woman. She was advanced in life, and had for many

years been accustomed to smoke her husband's pipe. Of the other cases, three were excisions of the female breast, on account of scirrhouus cancer; two amputations of the penis; one the removal of a cancerous growth from the thigh; one the removal of a testis affected with medullary cancer; and, lastly, one, the excision of a growth of malignant character, but of very slow formation, from over the wrist-joint. All of these, excepting two, are still under treatment. One case of removal of the breast reported last month has since died; the others are all convalescent.

Excision of Non-malignant Tumours.—Number of cases, 17; cured, 6; under treatment, 11. Two of these were fibrous polypi of the uterus; one removed with the scissors by Mr. Wormald, from a patient in St. Bartholomew's Hospital; the other—an unusually large one—by Mr. Shaw, in the Middlesex Hospital. Of the six cases reported under treatment last month, four have been discharged cured.

Operations for Urethral Stricture.—Perineal section (Syme's) by Mr. Quain, in University College Hospital; the patient remains under treatment. Mr. Simon's patient in St. Thomas's Hospital, alluded to last month, is still under treatment.

Paracentesis Thoracis.—In a case under the care of Dr. Chambers, in St. Mary's Hospital, of pneumothorax and secondary empyema, probably from the opening of a phthisical vomica into the pleural sac, the operation of puncturing the affected chest was performed at two distinct places by Mr. Coulson. The condition requiring it was one of great difficulty of breathing, from the compression of the left lung by the air and fluid, which distended the right pleural sac. From the first opening, which was low down on the side, only thin pus escaped; from the second, which was higher up and in front, a copious stream of air rushed out. The patient—an Irish lad of about 14—has been considerably relieved by the measures adopted; he is still in the hospital. Dr. Bennett's patient, in St. Thomas's Hospital, on whom this operation had been twice performed at the date of our last report, continues under care. The lung has considerably expanded, though the chest yet remains three parts full of fluid. The opening was closed immediately after the puncture, and the operation has not been again repeated.

Paracentesis Abdominis has been performed fifteen times; once for a very large hydatid cyst; six times on account of ovarian dropsy; and eight times for ascites. One of the latter died of peritonitis three weeks afterwards; but, as he had been without any symptom of that affection during the first fortnight, there did not appear any reason for connecting it with the operation; from all the others, the patients recovered without ill consequence. The case of hydatid cyst was under the charge of Mr. Holthouse, in the Westminster Hospital. The tumour was situated in the right hypochondrium, and, the trocar opening having been enlarged, several pints of fluid were evacuated, containing great numbers of hydatids. The man has been made an outpatient, and is now convalescent.

Ligature of Nævus.—The case left by last report is still under treatment. No others have been performed.

Radical Treatment of Hydrocele.—Number of cases, 5; 4 of which are well, and 1 is still under treatment. One of the successful cases was treated by Mr. Statham, in University College Hospital, by means of the seton. A case mentioned last month as still under care has since left the hospital for a time, the treatment pursued (injection of port wine) having failed to effect the obliteration of the sac.

Tracheotomy.—This operation has been performed three times; in each case for the relief of extreme dyspnoea, consequent on syphilitic laryngitis. All the patients are convalescent, but two of them are as yet obliged to retain the canula. In the third, however, the wound has healed. (For details respecting two of these cases, see *Medical Times and Gazette* for Sept. 10.)

Tenotomy.—Division of the tendo achillis for talipes equinus, by Mr. Solly, in St. Thomas's Hospital. The patient's deformity has been cured.

Operation for Fistula in Ano.—Seven cases have been operated on; all have recovered. Of the three cases remaining by last report, two are now well, and one is still under treatment.

Puncture of Bladder.—One, by Mr. Coulson, in St. Mary's Hospital. See *Medical Times and Gazette*, for Sept. 3, p. 244.

Operation for the Cure of Ununited Fracture.—In a case now in St. Bartholomew's

Hospital of ununited fracture of both bones of the forearm in a healthy woman, Mr. Paget has made trial of setons introduced between the ends of the bones. They were withdrawn on the ninth day, and did not occasion any excess of inflammation or other ill consequence. It is too early yet to know whether union is in progress; the arm is kept strictly at rest on a splint.

Neurotomy for the Relief of Neuralgia.—In a case of severe neuralgia, now in King's College Hospital, Mr. Fergusson has divided the mental branch of the inferior dental nerve. A similar proceeding had, on two previous occasions, given relief to the pain for several months.

Plastic Operations.—*Harelip*.—One case by Mr. Paget, in St. Bartholomew's Hospital, still under treatment. *Staphylo-raphy*.—Four cases, one of which, in a lad of 14, has failed from sloughing; the other three have been successful. The operators on the three latter were Messrs. Fergusson, Lloyd, and Avery. *Vesico-vaginal Fistula*.—Two cases; one by Mr. Pollock, in St. George's, and one by Mr. Baker Brown, in St. Mary's Hospital. Both cases remain under treatment. A transplanting operation for the closure of a large opening into one side of the nose, left by ulceration, has been performed by Mr. Erichsen, in University College Hospital, and is still under treatment. Another transplanting of skin has been performed by Mr. Fergusson, in King's College Hospital, for the relief of a deformity produced by the contracted cicatrix of a burn; and it, together with a similar one by Mr. Hilton, in Guy's Hospital, mentioned in our last report, still remains under treatment.

Extraction of Cataract has been performed three times with success; once by Mr. Wharton Jones, in University College Hospital, and by Messrs. Tatum and Johnson, in St. George's. Mr. Johnson's patient was a woman of upwards of seventy. The case mentioned last month as remaining under care has been discharged well.

Operation for Artificial Pupil.—One by Mr. C. G. Guthrie, in the Westminster Hospital, still under treatment. The pupillary margin of the iris was drawn outwards and downwards, and left adherent to the wound.—*Med. Times and Gaz.*, October 1, 1853.

History of the Recent Epidemic of Infantile Leucorrhœa, with an Account of Five Cases of alleged Felonious Assaults recently tried in Dublin. By WILLIAM R. WILDE, F. R. C. S., Surgeon to St. Mark's Hospital.

(Continued from p. 158.)

I now come to the medical portion of the testimony, as well as to the details of the part which I myself, and so many of the profession here, took in the subsequent history of these two cases. Having heard, early in the morning, of the man's arrest, and the crime of which he was accused, I wrote to Mr. Fitzgerald, the eminent solicitor, to request his attendance, and, proceeding to the police-office with a county magistrate, who happened to breakfast with me, I learned the particulars of the charge, and that Dr. Ireland, the medical officer of the police, and the authority always consulted in such instances, was sent for to examine the children, and had appointed twelve o'clock for that purpose. I then made an application to Mr. Bourke, the presiding magistrate, to be present at that examination, a request to which he at once politely acceded, at the same time remarking that he believed the prisoners had a right to the benefit of a medical man upon such occasions. I next proceeded to that portion of the office where the children were in charge, and delivered the magistrate's order to the superintendent of police, who, through the medium of a Sergeant Fitzpatrick, subsequently delivered it to the medical officer. I did not hold any communication with the prisoner, nor see him, until he was brought to the bar during the subsequent investigation; but I returned at the appointed time, and remained with the magistrate until the medical officer had arrived, about an hour afterwards. He informed me that he had received the message, but could not think of letting me be present, as he "was a public officer, and had a public duty to perform;" but that I might make my mind easy, as both the children had a most profuse purulent discharge from the genitals, that the man was perfectly free from any disease whatever, and that he was "under the impression that the magistrate would adjudicate summarily upon the case;" with all of which I acquainted the prisoner's solicitor. The medical officer, in his examination before the magistrate, said he could not say whe-

ther the disease was gonorrhœa or not, but he subsequently swore that, although purulent discharges, redness, swellings, and excoriations, such as those children presented, might be occasionally the result of dirt, or "riding upon a stick;" and notwithstanding that there was "no laceration whatever," and "no appearance of an attempt at penetration," yet that such appearances might also be "*the result of violence;*" upon which the magistrate at once said, that he would take the informations, send the case for trial, and commit the man to prison, whom the medical examiner also swore to be perfectly free from gonorrhœa or any venereal disease; nor did he even appear, after the most careful examination, to have ever had any affection of that nature.* The prisoner was then removed. Shocked and distressed at the result of the investigation, I then left the office without offering bail for the prisoner, who was sent to prison. On conferring with the solicitor, he told me that, from all he could then learn, he did not believe the man to be guilty; but that, at all events, the circumstance of both children swearing to the commission of the act upon the self-same day and hour, without either having seen the other, would acquit him. The solicitor took notes of the examination; so also did the police clerk, in order to save trouble in subsequently drawing up the children's informations. Fortunately for the cause of truth and science, the medical officer, contrary to his usual habit, swore an information in both cases, of which the following is an extract: "There is a discharge of purulent matter, which may have been caused by some violence applied, or might have arisen from want of cleanliness, or from riding on a stick. There has not been any penetration of the vagina. Could not say whether the discharge is gonorrhœa or not. That there is some excoriation which is confined to the exterior parts of the private parts, but no laceration." The testimony was almost in the same words in both cases.

* I do not know what the usual form of examination of a man accused of this crime may be in England; but I believe the rule is, in all cases, to desire a prisoner "not to say anything which might criminate himself, or might afterwards be used against him." Upon the prisoner Kaine being brought before the medical officer of the police, and after the inspection was instituted, he was asked by the physician, "When did you get this little running?" to which the man indignantly replied, "I beg your pardon, sir; I have not had any running."

Much dissatisfied with the police investigation, and believing that the whole was a trumped-up story, especially as I was excluded from the medical examination, I immediately after called on Dr. Geoghegan, Professor of Medical Jurisprudence, and requested him to see the children; and I also waited on Dr. Ireland, as a matter of professional etiquette, and told him of my desire to see the children, along with Dr. Geoghegan and himself; and subsequently an appointment to that effect was made for three o'clock next day. As soon as I saw the children, and recognized the disease under which they laboured, I at once saw the mistake that had been committed; and, subsequently confirmed in my opinion by Dr. Geoghegan, I determined to offer bail for the accused (which was required to a large amount), and to defend him to the utmost of my power. The child Cosgrave appeared to be much out of health, and had recently lost a portion of the nail of one of her fingers from whitlow, which, she said, had caused her "great pain." This trivial fact is of great importance, as will appear in the sequel.

My next step was to request of Mr. Cusack, Dr. Churchill, and Dr. Hatchell, to examine the children. I chose these three persons on account of their peculiar positions in the profession—a professor of surgery to the university; a lecturer and distinguished writer upon the diseases of children; and the medical officer to the constabulary (not the metropolitan police). I procured copies of the informations from the magistrates; from the same source I obtained the services of a police constable to conduct the medical men to the residences of the children, and, having given bail for the prisoner, I took him out of prison. Placing the five informations which were sworn in the hands of these gentlemen, and committing them to the guidance of the police officer appointed by the magistrate, I sent them to examine the children; and I also submitted for their inspection the accused, about three o'clock upon the Monday after the Saturday upon which the case was investigated at the police office. In the course of the evening, I addressed a series of questions, twelve in number, to each of the four medical men who had examined the children and the accused, with respect to the diseased state in which they

found the children—as to whether such could have been the result of violence or mechanical irritation—whether the assault could have been committed at the time specified, without producing so much pain and soreness as not to attract the attention of friends—whether the vaginal discharge and excoriation which these children presented, could have arisen from attempts at violation, etc.; and also as to the state of the accused, etc. It is unnecessary here to go into the minutiae of these questions, or the answers returned, which, together with two shorthand writers' notes of the trial, I intend to publish hereafter. Suffice it to say, that the answers of these four eminent authorities completely exonerated the accused, and showed, as far as medical evidence could show, that the crime had never been committed, and that the whole was a misconception arising out of the popular delusion so graphically detailed by Cooper nearly forty years ago.

A few days after, I waited upon the attorney-general, with a written statement of what I conceived to be the facts of the case—describing the popular delusion; giving a verbatim copy of the medical men's opinions; referring him to the various medical and medico-legal opinions upon the subject; and finally giving him the minutiae and circumstantial details of an *alibi*, showing that the accused was not at the place specified for four hours before nor three hours after the date assigned for the commission of the crime. He told me that he had ordered the case for trial, possessed the most "corroborative proofs" of the children's statements, and could not possibly receive anything offered in the prisoner's defence. I endeavoured to argue the case, and show him that the crime had not been committed, and that the whole was a popular prejudice founded in ignorance and superstition, and put to him several cases in which it would, I thought, be his duty, as a public prosecutor, to quash the proceedings; but these he said he could not, in the present instance, possibly entertain, and added that it would not look well to give up the trial of a "doctor's servant" because other medical men came forward in his behalf. I therefore took my leave, assuring my friend, the attorney general, that I would certainly defeat him at the prosecution; as, being fully assured not only of the man's

innocence, but of the non-committal of the crime, I was determined to defend the prisoner to the utmost of my power.

The grand jury found bills of indictment in both cases, and a day was fixed for the trial.

Two very eminent lawyers, whom I waited upon, refused to undertake the case: it was a nasty one; and crimes of that nature were not easily defended, etc.

Powerful advocates, well acquainted with such cases, were, however, obtained. A day was fixed for the three trials, one of which, that of Barber, has been already detailed; and Professors Cusack, Beatty, and Geoghegan, and Drs. Churchill, Hatchell, and Hughes, generously came forward, at considerable inconvenience, to bear testimony upon the subject at issue. The prisoner was given in charge for the full crime of rape, viz., that of carnally knowing and abusing a child under ten years of age; and it was evident, from the array of queen's counsel, that the crown were bent upon attaining a conviction, in order, if possible, to put down that offence, which, from the number of cases which presented, appeared to be epidemic in the city, and in which they had already been foiled in the instance of Tracy. The Lord Chief Justice of the Queen's Bench (Lefroy), and the Chief Justice of the Common Pleas (Monaghan), presided. I procured the attendance of two special reporters from the newspaper offices, whose notes of the trial will appear in due course.

The Honourable Mr. Plunkett stated the case with exceeding moderation, remarking upon the previous exceedingly good character of the man, and saying, most justly, that the principal question which would arise was entirely a medical one, being as to the nature and cause of the appearances which the child Cosgrave, the first case called on, presented. The prosecutrix, nine and a half years old, who was an admirable witness, went through the recital already mentioned, and entered very minutely into her reasons for knowing the precise hour, such as looking at the clock upon her return home, and, in order to make sure, asking her mother what o'clock it was, etc.; stated that she walked over to her sister's, at a distant part of the city, shortly after the crime was committed; that the difficulty of making water, soreness, and discharge commenced the day after the committal of the

offence; denied that she hesitated for a moment telling her mother about the cause, but acknowledged that it was her mother first asked her about the prisoner Kane. The mother and an elder daughter were examined; they, however, contradicted themselves and the child in many particulars, but were quite agreed in fixing the same day and hour as that stated by the child, and gave special reasons for their remembering them. The mother said the child came home to her "crying," at the time when the offence is alleged to have been committed; but acknowledged that she asked her was it her finger (then affected with severe whilow, and from which she lost her nail, which was paining her, and she said it was. This crying was one of the "corroborative proofs" relied on by the crown. Dr. Ireland, the medical officer of the police, described the state of disease the children were in, and said: "I do not think a man's private parts could enter the vagina of this child; but the penis might go between the labia, which were the parts diseased. I cannot say what the nature of the disease was. It might have been produced by external irritation. The irritation produced by a man's penis might, I think, produce it." And again, to the court: "I am of opinion that the discharge may have been produced by friction with the penis of a healthy man." This seemed to be, at that period of the case, the turning point of the evidence for the crown. Mr. Curren then commenced to read the opinion of Sir Astley Cooper, to which I have already referred, but was stopped by the lord chief justice, who said that "it was not law nor evidence, but only a medical man's opinion." The witness, however, upon being referred to the extract, said: "I perfectly concur in everything stated by Sir Astley Cooper; but, in the present case, I have formed my opinion without reference to the views of any other surgeon." Professor Harrison was in court to watch the proceedings. He had been sent by the crown to examine the children; but, having done so, he reported to the authorities that he could find nothing to warrant the conclusion that any violence had been attempted. Had the case for the crown not broken down, he would have been examined on behalf of the prisoner.

It is unnecessary here to describe the speeches of counsel, which were in their way admirable, and well calculated "to get

off" a prisoner. I had, however, in common with my professional brethren who were present, a much higher object in view: that of explaining to the court and the public the delusion under which the whole case was got up, and of showing that the crime had not been committed. It was manifest, however, throughout, that the court was rather against the prisoner, and that the crown counsel earnestly sought a conviction.

The first witness examined for the defence was Mr. Cusack; that portion of his testimony which particularly bears upon the case is as follows: "I examined the two children (Cosgrave, the prosecutrix, and Delmire); both were affected with the same complaint. They were filthy, and had a discharge from the pudendum. There was a crust surrounding the parts upon the true skin, which arose from the deposits from the discharge. This child had not the slightest mark of violence; and it was simply a case of a disease which all medical men have met with, and which is very common among children who are strumous, or badly cared, or who have been in contact with each other. It is usually found in low life, but sometimes it is found in the better walks of life, where children have suffered from other complaints tending to weaken the constitution; and, I confess, I was horror-stricken at the time to hear that the prisoner at the bar was accused of such a crime. I was as convinced as I am of my existence, that there was no violence offered or attempted upon this child, and that this was a common disease which is universally known to the profession. I conversed with Sir Astley Cooper on this very subject, and I entirely concur with what appears in his lectures, that numbers have suffered unjustly from such charges as the present, being fabricated by the mothers of children." This evidence, which was given in a very decided and energetic manner, seemed to produce a considerable sensation in court; on which the lord chief justice and the crown counsel cross-examined the witness to a considerable extent, in order to show that, although there were no marks of violence, "a penetration between the labia, accompanied with force, but not sufficient to do any injury to the surface," might have occurred. In answer to this mode of putting the question, the witness said: "If the penis was brought into contact with the

parts, and a discharge ensued in consequence, it would certainly be a species of violence; but, in the present case, there was nothing to show me that any friction had taken place externally, or that any attempt had been made to do anything wrong. I am confident that the discharge was not, in any respect, the consequence of friction from the penis of any man. If there is violence, it would cause pain, but I could find not a trace of violence upon this child." One would have thought that this evidence might have induced the crown to give up the case; but the lawyers only took it up the more determinedly, and, seeing that disease from natural causes was established, changed their hand, and endeavoured to prove, by the subsequent witnesses, that, acknowledging the child was in the diseased state described at the time the crime was committed, still penetration between the labia, without what might be styled violence, but as a simple application of the parts, might have taken place; as the chief justice described it, the introduction of the parts without force, and even to the "hundredth part of an inch."

Prof. Geoghegan swore with regard to the state of uncleanliness in which he found the child, and said she had "a chronic disease of, I should say, several weeks' standing. In my opinion, it was not possible that the disease could be of one week's standing, and I am further of opinion that the disease could not have resulted from violence of any undiseased man. Had the assemblage of appearances I witnessed resulted from violence on the part of an undiseased man, there would have been other signs of violence present, which were not visible in this case. If violence had been committed upon this child by a man lying on her upon the hay, so as to hurt her in that way, I think she would not be able to walk over to Ship Street in the evening and home again the next morning." The crown pressed this witness also upon the subject of the friction alluded to by Dr. Ireland. His answer was: "In my opinion, violent friction by a man against the private parts of a child could not have possibly produced the disease I saw, because—first, it was of long standing—and, second, if there had been sufficient violence to produce such a copious discharge, it would have produced other signs that were not present in this instance." Mr. Corballis,

Q. C., then put the following question, which evidently threw overboard all the previous medical testimony, and is one upon which the most serious consequences may hereafter hinge: "Is it possible that, supposing the child to have had this disease at the time of the alleged offence, a man might, on the 15th of July, have introduced the extremity of the penis between the labia and no further?" Dr. Geoghegan said: "It is; but, if such an attempt were made, considering the great disparity of the parts of the man and child, I think it could not be done without a certain degree of laceration."

Dr Churchill was next examined, who gave similar testimony to the foregoing with respect to there not being the slightest evidence of violence, and that the disease was ordinary infantile leucorrhœa. He was cross examined at considerable length, in order to elicit an admission of the point on which the crown then relied—that "slight penetration, without giving pain," might, notwithstanding the state in which the children were, have taken place. His answer was: "I think penetration in a child so young, and where the organs are so disproportionate, would give pain." Each of these three medical men also deposed as to the healthy state of the prisoner, whom they had minutely examined.

The counsel for the defence now said, they saw clearly that, notwithstanding the high medical evidence which was brought forward, the crown were determined upon a conviction, that the court were with them, and that, if the jury brought in a verdict of guilty, the man would certainly be transported; that there was no use in offering more medical testimony, and that nothing but the *alibi*, to which I have already alluded, could possibly save him. It was therefore thought advisable not to produce any more medical witnesses, but to have recourse to the *alibi*, which was not brought forward in the first instance for two reasons: first, because it would be necessary to produce in court a lady whom the prisoner was driving through the town at the time of the alleged offence, and for more than two hours afterwards; and, secondly, because I myself, and a large body of the profession here, were most anxious to have a full medical inquiry into the case, in order to show what the disease really was which had been mistaken by the infatuated mo-

thers for the result of violence; and also to show that no crime had been committed. Fortunately, the court retired for a short space, and time was thus allowed for sending for the lady who was the principal witness for the *alibi*. Regarding this portion of the defence, it will be enough to say that it was satisfactorily proved that from half-past nine in the morning until half past three in the afternoon of the day upon which the crime was said to have been committed (between twelve and one o'clock), the prisoner was engaged driving, and never returned to his stables. The crown, thus foiled, endeavoured to break down the *alibi* by a lengthened cross-examination, but ineffectually, as, by a very remarkable concatenation of circumstances, the usual time for the man's return to the stables was interrupted upon this particular day, and he was, upon the whole, nearly seven hours without returning to the stables. A child might possibly mistake or forget the day, but the mother and sister had fixed the precise date with such certainty as to leave no loophole for escape upon this point.

Upon seeing the turn the *alibi* took, the lord chief justice rather testily said to Mr. Rolleston, one of the prisoner's counsel, "Why didn't you give us the *alibi* first, instead of treating us to a medical dissertation?" He very properly answered, that he did not like to produce a lady in court, and that he thought the medical evidence would have been quite sufficient. The court then appealed to the crown counsel as to whether they could possibly go on with the case after the *alibi*. The case was then given up, and an issue having been handed to the jury in both cases, that of Cosgrave, just related, and also the child Delmere, the jury, by direction of his lordship, acquitted the prisoner.

Now, with regard to the case of the child Delmere, to which I have already alluded at page 157, and who swore before the magistrate to the committal of the crime upon the 15th July, at one o'clock, the same day and hour upon which the child Cosgrave said she had been violated—upon procuring copies of the informations two days after they were sworn, I was much astonished to find that the date of the offence in this case was three days different from that sworn to in the first instance, in the *viva voce* testimony. I immediately applied to the magistrate for an explanation of the circumstance. He

informed me, that he had himself observed the peculiarity of the different date being in the informations which were read over to the child when she came to swear them (after the prisoner had been removed, and the solicitor and myself had left the office), to that which she swore to originally ; but that he passed no remark thereon. The clerk who took down the evidence said he had destroyed his notes. Both the magistrate and clerk were subpoenaed to the Commission, and would have been examined as to the circumstance, had the crown not given up the case. Both children being tutored, as I believe, into the recital of the same story, they naturally stated that the crime occurred upon the selfsame day and hour, a circumstance which must have attracted the attention of the person who subsequently prepared the information at the police-office, and who must evidently have seen that such an incongruity would have tended to the acquittal of the prisoner.

It is unnecessary to enter into the details of the five other cases of vaginal discharge in young children, to which I have already alluded. In the cases at the Pitt Street Dispensary, the symptoms were somewhat similar to those which formed the subject of the late trial, but the mothers being of a decenter class, and keeping their children cleaner, the extent of disease was not so great. The ages of the children were four and seven years. In that aged four, the mother entertained the same cruel suspicions, until assured by Dr. Croker of the nature of the affection. In the former case the disease was discovered on the 28th June, and in the latter the 15th of July, the date assigned to the two last cases of violation. The last case which I have heard of occurred about ten days ago. An intelligent woman, residing in a garret in Golden-lane, one of the most unhealthy localities in the city of Dublin, discovered a vaginal discharge in one of her children—a girl between four and five years of age. Greatly distressed at the circumstance, she informed her husband, who most properly desired her not to mention it to any of her neighbours, but to take the child to a doctor. She brought it to Mr. Dwyer, of Camden street, and, in great anxiety, stated her fears as to the nature of the discharge her child had got. Upon his offering, however—to use his own expression—"to take his oath"

to her that the disease the child had was nothing wrong, she was perfectly satisfied, and is now most grateful. I saw the child with Mr. Dwyer about a week ago (August 10). It was delicate and puny-looking ; there was some swelling and considerable redness of the labiae and external parts, from which, as well as from the vagina, there was a considerable yellowish discharge ; but, as the child was kept exceedingly clean, there was very little excoriation or eczematous rash. Mr. Dwyer was well acquainted with the affection, not only from the description given by Cooper, but from his having had a similar case about eighteen months ago, the particulars of which he has given me, and in which, upon the discovery of the discharge by the mother, she brought an accusation against a man who lodged in the same house, and upon whose knee she saw the child sitting some time before. In Dr. M'Clintock's cases, which both occurred in the early part of July, one child was aged three and a half, and the other four and a half years.

Mr. Hughes, one of those medical men who appeared on behalf of the prisoner at the Commission, had a case of the nature of the foregoing some time ago. The following is his letter to me upon hearing of the accusation brought against Kane :—

"A woman brought a daughter of hers, a child apparently under seven years of age, to Jervis-street Hospital, stating that she wished to have the girl examined by the surgeon on duty, as she was afraid that the child had been recently abused by a married man, a fellow-lodger of hers. I consequently examined the child, and found her labouring under inflammation of the vagina, accompanied by a profuse mucopurulent discharge. There were, however, no marks of violence on any part of the person of the child ; and, after a most careful examination of the person of the accused, no trace of disease could be detected on him. The case was investigated at Henry-street Police-office, by Mr. O'Callaghan ; and, as I looked on the case as one of simple vaginal inflammation, which all metropolitan surgeons not unfrequently meet with among the children of the lower classes of society—the result, in some cases, of extreme uncleanliness ; in others, of neglect of the bowels, irritation from the presence of intestinal worms, dental irritation, etc. etc.—the magistrate very properly dismissed

the case. I find it a very difficult matter to make the mothers of children so affected believe that the little patients have not been violated."

Dr. Beatty, in the article "Rape," in the *Cyclopaedia of Practical Medicine*, says that "in the year 1831 a man was arrested in the city of Dublin, on a charge of rape committed on a child, the only evidence of which was the presence of a purulent discharge from the pudendum. Popular opinion, as is usual in such cases, ran high against him, and it was only through the positive opinion of an intelligent surgeon that the case was explained, and the man liberated. A case of a somewhat similar nature lately came under the observation of the writer. A lady and gentleman came to his house one evening, in a state of great alarm and excitement, accompanied by their child, a girl of four years old, whom they stated to be affected with a terrible disorder, communicated to her by some person in their employment. They had previously shown the child to an apothecary, who confirmed their worst apprehensions, and at once declared that the girl had got a clap. On examination, the parts were found in a state resembling that just described, with a free purulent discharge; and it was with no small degree of pleasure that the writer was able to console the parents by assuring them that their child was labouring under no uncommon affection, and that a few days would set all to rights. It has rarely fallen to his lot to witness a more sudden transition from grief to joy than that this announcement effected." Such will, I am sure, be the feelings of every humane man—such I believe to be the bounden duty of every educated and benevolent practitioner who meets such cases—no matter whether employed by the police, performing the office of a surgeon or physician to a public institution, or consulted in private. Such explanation should be given in mercy towards the infatuated parents, and the threatened, in some cases the tutored child, as well as in justice towards the accused, and also for the credit of the morals and religion, as well as the honour of the country.

The last notable case of this description, which occurred in Dublin, until the date of the present epidemic, was more upon the type of Cooper's, or in accordance with his description, than any I have read of for some time. A soldier, of the 7th Dragoons,

named Fitten, was on guard at Kilmainham Hospital on Friday, the 15th August, 1851. Two little girls, daughters of a pensioner, named Fitzpatrick, one aged 6½, and the other about a year older, were remarked playing with him during the course of the day. In the evening he was seen sitting with the children upon a bench, and subsequently with the younger child on his lap. Upon the Tuesday following, the younger child complained to her elder sister of having a discharge. The mother was in the habit of changing the children's linen twice a week—on Sundays and Wednesdays. On Wednesday she remarked the young child's linen soiled with a yellowish discharge, which she found proceeded from the genitals. She at once asked the child who had been with her, particularly upon whose lap she had lately sat. Fitten, the soldier, whom both mother and sister had seen her with upon the Friday evening, was named, and the usual course of interrogating (as subsequently appeared on the trial) was gone through. The woman rushed with her child to the nearest medical practitioner; he confirmed her suspicions by telling her the child had gonorrhœa. The mother and child proceeded at once "from the doctor's shop" to the police-office, and made their complaint; the soldier was arrested; four or five informations—which I have examined—were sworn by the child as to the fact; by the mother, as to the discovery of the child's state; by the sister and two soldiers, as corroborative evidences of the child being seen with the soldier at the time and place specified; and by the medical man, as to his having examined the child, and found her private parts in a state of great inflammation, and with discharge "very much resembling gonorrhœa." The man was committed to prison. He was examined, and found perfectly free from either gonorrhœa or syphilis. The case was tried before the Chief Baron at the October Commission, 1851. From the amount of corroborative evidence, it was believed there would be a conviction; and, as the man did not bear a very good character in his regiment, there was but little sympathy for him. Mr. Coffey was retained to defend the prisoner. He informs me that—as I have already mentioned in a previous part of this communication, as a peculiarity in such cases—he at first felt some hesitation in undertaking the defence of such a case,

especially as, from a perusal of the informations, he thought the prisoner guilty. A medical friend, however, drawing his attention to Cooper's description, he at once saw the similitude, and, acting upon the suggestions therein contained, finally succeeded in having the man acquitted. The child swore that the act was committed while she was sitting on the soldier's lap, with his cloak around her. In the cross-examination of the corroborative evidence of the soldiers, it appeared that the sentry—an armed man—was walking up and down within a few yards of them the whole time, and must have heard the child cry if any force had been employed. Mr. Coffey also took the precaution of examining the place where the offence was alleged to have been committed, and directed a surveyor's measurement of the ground to be made. The result was curious, showing that the crime, if committed at all, must have occurred within ten feet of the sentry-box, and within view of a guardhouse, which was but thirty feet from where the prisoner sat with the child in his lap. The medical man, in his examination, differed from what he swore in his informations, and then stated that the appearance which he observed, the swelling, discharge, etc., "might be the result of violence." This difference, in his opinion, somewhat like what occurred at the late commission, weakened his testimony in the minds of the jury, particularly as he admitted, on cross-examination, that he had treated the child for several days for gonorrhœa. The prisoner's counsel read the statement of Cooper. The surgeon of the regiment bore testimony to the healthy condition of the man, not only at the time of his arrest, but immediately before the date of the offence, as, being a soldier, he had inspected him weekly. He also bore testimony to the nature of the disease with which children are sometimes affected, and stated that he had met several instances of the kind described by Cooper. The Chief Baron, in charging the jury, said it would be a very happy thing for all parties concerned, if the jury could, after the evidence, come to the opinion that the crime had not been committed, and that the whole was a mistake. The prisoner was acquitted. The case excited much interest, but, owing to the nature of the examination, did not appear in the newspaper reports. The foregoing statement, however, which I received

from several of the parties concerned, as well as an examination of the informations, may be relied upon. It was made a subject of strong observation to the jury, by the prisoner's counsel, that, had the unfortunate soldier been affected with disease, he undoubtedly would be convicted upon the medical testimony, although the man was undoubtedly innocent.

Sir Astley Cooper says that he had met thirty such cases in the course of his life, and concludes his observations by saying: "I am anxious that this complaint should be known by every one present, and that the remarks which I have made should be circulated throughout the kingdom." In the celebrated case recorded in the early editions of *Percival's Medical Ethics*, and which occurred in Manchester, in 1791, the child absolutely died of the disease, and a verdict of murder was returned by the coroner's inquest, against a boy, from the suspicion that violence had been offered. "Not many weeks elapsed, however, before several similar cases occurred in which there was no reason to suspect that external violence had been offered; and some in which it was absolutely certain that no such injury could have taken place."^{*} Now, this is exactly what recently occurred in Dublin. First comes the case of Geoghegan against Tracy, tried before the Recorder at the beginning of summer. Not many weeks elapsed, however, before eight similar cases occurred, in five of which suspicions and accusations arose; and in three of which the crown prosecuted at the late commission, although offered satisfactory proofs of the non-committal of the offence, or what perhaps lawyers think of more consequence, proofs of the impossibility of finding the prisoners guilty. Before disposing of the celebrated Manchester case, it is but due to the memory of Mr. Ward, the surgeon who first examined the girl, to say that, before the trial came on, he being convinced that he was under a mistake, most properly came forward and stated so. And "the judge informed the jury that the evidence adduced was not sufficient to convict; and that it would give rise to much indebate discussion if they proceeded with the trial." It was accordingly abandoned.—*Med. Times and Gaz.* Oct. 8, 1853.

* See Beck's *Medical Jurisprudence*.

[To be Continued.]

SKETCHES AND ILLUSTRATIONS
OF MEDICAL QUACKERY.*Proposed Society for the Suppression of Fraudulent and Obscene Advertisements* —

In our preceding No., p. 158, we inserted an article, copied from the *Association Medical Journal*, calling attention to the powerful support which quackery received from the press, especially from newspapers and religious periodicals.

In a subsequent No. of the *Association Medical Journal*, the editor states that, since the publication of his article referred to, "We have been in correspondence, upon the subject of the suppression of fraudulent and obscene advertisements, with many influential persons; and the conclusion generally arrived at has been, that this object might be accomplished to a great extent by a judiciously managed society; but that, without the organization of such a body, little fruit could be expected from the isolated efforts of respectable editors and others. We expect very soon to be able to announce the actual establishment of this society—society with which we shall always be rejoiced to co-operate, in endeavouring to redeem the better part of the periodical press from its present degraded position of hireling servitude to medical swindlers and obscene advertisers. The literature of Holywell Street, and the pseudo medical papers, may be found to require special treatment.

"If the attack on quackery in the fourth estate be wisely directed and well sustained, it cannot fail to be crowned with success. There are a few, we know, ready to maintain, that so essential is the money of the quacks to the very existence of most of the provincial newspapers, such an attempt as that proposed can only be regarded as a well-meant but hopeless crusade. A pretty extensive inquiry into the state of public feeling leads us to adopt a more cheering view of the case. We feel assured that there is an enormous power, slumbering at present, but quite ready, upon a proper signal being given, to march forward in united phalanx, and drive forth the quacks from their 'strongholds in the fourth estate,' which at present seem almost impregnable. The reformation required is fortunately keenly desired not only by the medical profession, but by large numbers of the nobility, clergy, and gentry. The preliminary organization must be ex-

tensive and careful; and the movement, when once commenced, must be ever onward, with unflinching hand and unfaltering step; but, if these conditions be complied with, victory is certain.

"As some encouragement to deal faithfully and firmly with offenders in the fourth estate, let us recall attention to our former remarks upon the appearance of quack advertisements in periodicals aspiring to be considered the champions of religion. We particularly complain of the strange inconsistency of the *Edinburgh Christian Magazine*, which, in its number for April last, denounced quackery as a practical 'denial of the wisdom of God's arrangements in the world,' and yet sold a place upon its wrapper to the *soi-disant* Professor Holloway, for his 'extraordinary cures.' The publishers, to their honour be it proclaimed, have for the future resolved to keep their advertising columns free from Holloway's swindling notices; and we have no doubt that many other proprietors of papers which seek to be called religious and Christian, could be induced, by means of suitable representations, to make their conduct harmonize with their professions."

So long as the conductors of the periodical press are so weak or venal as to give their support to quacks, it will be utterly impossible to abate the evils of quackery. A society which shall exert its influence in redeeming the press from the evil influences by which it is now controlled, might be productive of the greatest good, and we should be rejoiced to see a society established in this country with such an object.

Quackery in Great Britain.—Surely the quacks thrive apace, and apparently are permitted to exist undisturbed and unmolested. In the United Kingdom alone *many thousands of persons* at this moment are attempting to gain a livelihood in the profession *without the possession of any legal qualifications whatsoever*. In every city, in every town, in every hamlet of the empire are medical men day after day thus wantonly insulted, their feelings outraged, and their intelligence ignored. A premium seems offered to rank knavery, and a prize proffered to ignorant cunning. Are people about to retrograde to the dark ages? or are solid impudence and unabashed worthlessness to be the qualities most admired in the present day? Are educated men—persons endowed with talent and refine-

ment—to succumb before insolent and pitiful impostors—to give way to individuals who can be designated by no title but that of *scoundrel*, and lay claim to no position save that of *quack*?

It is high time that this subject should be thoroughly considered and openly discussed in all its bearings. There is every reason to believe that homeopaths, allopathists, mesmerists, mountebanks, extortioners, *et id genus omne*, are at present increasing in numbers, and the public, singularly deficient in this matter in judgment and discrimination, are preyed upon on all sides, and cheated and plundered to an alarming extent. Indeed, upon all subjects of a medical nature, it is remarkable how easily even educated and intelligent persons are tricked, misled, and deceived by the most shallow frauds and palpable impostures. Dogmas the most irrational, theories the most transparent, and creeds of the most unsound and erroneous nature find zealous converts and ready disciples in men who in every other circumstance of life are slow, and cautious, and wary in giving in their adhesion unless their reason is convinced and their common sense satisfied.

This absence of knowledge upon all—even the most commonplace—subjects relative to the maintenance of health, or the simplest rules of hygienes, is very prevalent amongst all classes, and is attended very frequently with disastrous and lamentable consequences. What but credulous unbelief and blind ignorance render whole corporations so obstinate in their opposition to sanitary improvements, so heedless of the most reasonable suggestions and necessary measures, or so careless in taking timely warning, and profiting by the results of acquired experience? What but an utter disregard and want of attention to all subjects of this nature make men rush after every fresh empiric who starts into existence, run after his specifics, and praise his drugs? Although of course in a little while they find out that they have been deceived, and that their own foolishness made them his dupes. But thus do the public go on, tricked, cheated, plundered, preyed upon, the victims of every quack and impostor who parades his name before them. And not a whit do they profit by experience; deceived one day, they are as ready to be gulled and defrauded the next. PARR, MORRISON, HOLLOWAY, have each in their turn been the talk, and jest, and byword of

the metropolis; and though it is well known that their assertions are lies and their *remedies*, so called, shallow deceptions, still these men manage to trade or barter their compounds, victimize the poor fools that rely upon them, and derive vast incomes from the enlightened patronage of our discriminating public!

It is our desire to lay before the readers of the *Lancet* a complete and thorough description of the vast crowd of impostors and quacks that infest the profession, or assert pretensions to medical knowledge. On the present occasion, we wish to direct attention to the manner in which the gross ignorance that exists amidst all classes of society, upon subjects connected with the profession of medicine, feeds, cherishes, and, as it were, actually calls into life the greater number of the impudent cheats and extortioners who impudently intrude themselves upon the notice of the public. Could mountebanks of the most disreputable character, and scoundrels deficient alike in all education and knowledge, follow a successful and profitable trade, if they did not discover persons silly enough to trust in their assertions and rely upon their statements? Most assuredly not; yet day after day newspapers teem with fresh notices of these pretenders, and new "cures" are continually palmed upon public credulity. Wholesale testimonies from people who either never existed, or whose previous decease had been carefully ascertained—certificates of *cure* from persons of rank in distant parts of the country, who very likely have never heard of the quack compound, for whose efficacy they are made to vouch, and have perhaps at no time in their lives suffered under the disorder from which the *remedy* (?) is asserted to have relieved them—these are the fabricated falsehoods by which the public are entrapped! If this were not the case, could these knaves any longer exist? Would not they at once try some other game, and strive to subsist in a different manner? The axiom, therefore, that we wish to lay down is this: that if the public were not so easily gulled, these quacks, extortioners, charlatans, and scoundrels would very soon disappear. In truth their tricks have been so long carried on, and their palpable frauds so frequently exposed, that it is almost a matter of wonder, that so many persons still remain deaf and unconvinced by the voice of experience.—*Lancet*, Oct. 15, 1853.

MEDICAL NEWS.
DOMESTIC INTELLIGENCE.

Statistics of the Weather and Mortality in Philadelphia for the year 1852.

THE WEATHER FROM 1835 INCLUSIVE UP TO AND INCLUDING THE YEAR 1852.

	Rain during some portion of the twenty-four hours.	Rain the whole or nearly the whole of the day.	Total number of days on which rain fell during the year.	Snow, including very slight falls.	Cloudy days without storming, including those partially overcast.	Total number of cloudy days.	Total number of clear days in the course of the season, equivalent of the term "clear."
Average for ten years immediately preceding 1845	84	29	113	24	58	195	170
Statistics for year 1845	98	25	123	27	70	220	145
" " 1846	90	33	123	22	81	226	139
" " 1847	32	94	126	20	69	215	150
" " 1848	111	20	131	21	69	221	145
" " 1849	93	25	117	29	82	228	137
" " 1850	112	27	139	31	57	227	138
" " 1851	97	21	118	22	78	218	147
" " 1852	103	22	125	31	74	230	136
Making the average for the last eighteen years about	91	33	124	26	70	220	145
The average for the years* 1835 and 1836 was	63	28	91	17	37	145	230
While that for 1851 and 1852 has been	100	22	122	26	76	224	141

MONTHLY STATISTICS OF SAME CHARACTER FOR 1852.

	January	February	March	April	May	June	July	August	September	October	November	December	Total	January	February	March	April	May	June	July	August	September	October	November	December	Total
	0	1	1	10	4	15	16																			
	4	1	5	8	4	17	12																			
	9	3	12	3	8	23	8																			
	14	4	18	4	5	27	3																			
	11	0	11	0	7	18	13																			
	12	0	12	0	3	15	15																			
	10	1	11	0	4	15	16																			
	12	2	14	0	9	23	8																			
	5	0	5	0	8	13	17																			
	7	0	7	0	11	18	13																			
	10	4	14	4	4	22	8																			
	9	6	15	2	7	24	7																			
	103	22	125	31	74	230	136																			

AVERAGE TEMPERATURE AT 9, 12, AND 3 O'CLOCK RESPECTIVELY, ALSO THE MEAN TEMPERATURE OF SAME HOURS, AND THAT OF THE EXTREMES OF EACH DAY.

	1851.			1852.				
	9 o'clock.	12 o'clock.	3 o'clock.	9 o'clock.	12 o'clock.	3 o'clock.		
January	33	39	41	37.6	35.22	24	28.6	27.50
February	38	43	46	42.3	39.78	32	35.6	34.05
March	41	41	51	44.3	43.05	38	43.3	49.75
April	51	57	61	56.3	51.93	45	50	46.60
May	61	70	74	63.3	62.58	30	68	57.6
June	69	78	81	76	70.40	69	77	71.78
July	77	83	85	81.3	76.82	76	82	80.6
August	70	78	80	76	72.40	71	76	72.02
September	64	72	79	71.6	67.48	64	70	64.79
October	55	61	63	58.3	56.55	56	62	60.3
November	41	45	46	44	41.80	42	46	43.15
December	28	32	33	31	30.04	40	44	41.09
Average mean temperature for the year	57.25	54				55.27	53.33	

<i>Amount of Rain that has fallen during various years.</i>				<i>Mean Temperature of the Months for 26 years, from 1825 to 1851.</i>			
Average from 1830, inclusive, to 1835, 41 3-5 inches.							
" 1835,	" 1840,	49	"	January, 31.9°	May, 62.4°	Septem.	65.4°
" 1840,	" 1845,	41 1-5	"	February, 32.5	June, 71.2	October,	54.2
" 1845,	" 1850,	43 2.5	"	March, 41.2	July, 75.6	Novem.	43.8
Amount during the year 1850, the usual quantity of		54 1-2	"	April, 51.9	August, 73.1	Decem.	34.5
Amount during the year 1851, only	35 4-5	"					
being about 1 1-5 inch above the average for the last fifteen years.	45 4-5	"					

The above is compiled from the record kept at the Pennsylvania Hospital, from which we find that from 1830 to 1851 (both inclusive) —

The smallest quantity fell in the years 1834, 34 inches.

" " " 1845, 35 "

The largest " " 1841, 55 "

" " 1850, 64 "

It may also be observed by comparing these statistics with previous ones, compiled for this paper, that

The smallest number of days in any year, since 1834, during some portion of which

rain has fallen, was 88 in 1837

The largest do. do. do. 139 in 1850

While the average number during the same period has been 124

Since the above was prepared for the press, it was thought well to introduce the following interesting statistics, "obtained through the courtesy of Dr. John Conrad, being compiled from the journal kept by him with great care at the Pennsylvania Hospital."

The warmest day in the year was the 16th of June, when the highest of the thermometer was 94°, and the lowest 78°.

The coldest day was the 20th of January, when the highest of the thermometer was 7° above zero, and the lowest 2° below zero.

The mean temperature of the year is 53.4°.

The mean yearly temperature for 26 years is 53.16°.

The temperature of the seasons, as deduced from observations, for 26 years, is as follows:—

Winter months,	33°	Summer months,	73.3°
Spring months,	51.8	Autumn months,	64.5

The warmest year was 1828, 55½°.

The coldest year was 1836, 49°.

<i>Amount of Rain for each Month of 1852.</i>			
Inches,	Inches,	Inches,	Inches,
January, 2.01	May, 3.04	Septem.	1.29
February, 2.71	June, 4.03	October,	2.27
March, 4.27	July, 4.06	Novem.	5.60
April, 6.44	August, 4.40	Decem.	5.18

Amount of Rain for each Year for 14 Years.

<i>Amount of Rain for each Year for 14 Years.</i>			
Inches,	Inches,	Inches,	Inches,
1838, 45.29	1843, 46.91	1848, 35.00	
1839, 43.73	1844, 40.17	1849, 42.09	
1840, 47.40	1845, 40.00	1850, 54.54	
1841, 55.50	1846, 44.38	1851, 35.50	
1842, 48.53	1847, 45.09	1852, 45.75	

The greatest amount fell in 1841—55½ inches; the least in 1848—35 inches.

Average Amount of Rain for each Month of the Year, for 14 years, from 1838 to 1851.

<i>Average Amount of Rain for each Month of the Year, for 14 years, from 1838 to 1851.</i>			
Inches,	Inches,	Inches,	Inches.
January, 3.26	May, 3.81	Septem.	3.54
February, 2.92	June, 3.58	October,	3.42
March, 3.78	July, 4.22	Novem.	3.46
April, 3.25	August, 5.13	Decem.	4.13

The greatest amount which fell in any month was in July, 1842—11.80 inches; the least amount in September, 1846—½ inch.

Mortality of New York and Philadelphia.

—According to the census of 1850, the population of New York was 515,507; that of Philadelphia, 408,702. And during the past year the aggregate number of deaths in New York was 21,558; in Philadelphia it was 10,245, or less than one-half. This contrast will strike the reader as most remarkable. The advantage to Philadelphia is truly decided.

With regard to our neighbours, however, it is fair to state that many of the victims were foreigners, who had landed in the country but a few weeks. The natives of the United States amounted to 14,871. The contrast, nevertheless, is decidedly in favour of Philadelphia, in reference to which the following minutiae are given of the deaths occurring in Philadelphia during the past four years:—

Years.	January.	February.	March.	April.	May.	June.	July.	August.	Septem-	Octo-	November.	December.	Totals.
1849	542	541	701	622	522	914	1,782	1,239	994	565	466	659	9,547
1850	469	570	719	597	621	829	1,045	1,225	647	565	636	550	8,473
1851	568	599	774	609	634	814	1,056	1,020	675	565	770	751	8,841
1852	1,041	838	889	808	900	975	1,098	918	770	735	681	832	10,245

It will be perceived that the excess of the year 1852 (including, as usual, the *stillborn*, which amounted to 512) was 1,404, while that of 1851 over 1850 was only 368. Some little allowance, however, ought to be made, from the fact that the account for 1852 includes the week ending on the first day of 1853, as well as four days of the preceding year.

The above account is compiled from the reports of the Board of Health, and is taken by weeks; that is, the month consists of all the *entire weeks* up to and including the last seventh day in the month, together with the additional week that may have commenced in the preceding month, when such cases occur. This is frequently counterbalanced by the fractional parts of weeks not counted at the *last* of the month, where it would otherwise belong. It may be proper to remark, that March, June, September, and December of 1849—and March, June, August, and November of 1850—the same of 1851—and January, May, July, October, and December of 1852, are each composed of *five entire weeks*.

Much more interesting matter in connection with this subject might be introduced, did time and space permit; but the following statistics, prepared by Dr. Wilson Jewell, of this city, must suffice, viz : "Mortality of Philadelphia for the year 1852." The total was 10,258, or an aggregate of 1,387 over 1851. This gives one death to every 39 and 8 10ths of a population of 409,000. Included in the foregoing, were 913 from the Blockley Almshouse, 832 coloured persons, and 108 persons from the country. The highest number of deaths in any one month occurred in January, amounting to 1,037, making 33½ deaths per day. The lowest number was in October, viz., 580; equal to 18½ deaths per day. The mean number of deaths per day throughout the year was 28.

Of the whole number of deaths, 5,049, or 49 per cent., were among children under five years of age. Of this great excess of mortality in infancy, 2,800, or 27½ per cent., occurred before the termination of the first year of life. In this calculation, we have included the "*stillborn*," which amounted to 516.

Of the deaths from all causes, exclusive of *stillborn*, 590, or 6 per cent., were beyond 70 years of age. Of these, 188 were over 80; 38 were over 90; and 7 were between 100 and 110 years of age. The most pre-

valent diseases in the community, and the number of deaths therefrom during the year, were as follows: Consumption of the lungs, 1,204; Dysentery, 558; Convulsions, 499; Inflammation of the lungs, 444; Scarlet fever, 433; Smallpox, 426; Marasmus, 354; Debility, 345; Cholera infantum, 329; Inflammation of the brain, 258; Dropsy of the brain, 247; Inflammation of the bronchiae, 208; Croup, 208. In all, 5,513, constituting a majority of the whole number of deaths recorded.

In the aggregate of deaths, we find the preponderance on the side of the males. While those among females amounted to 4,821, the male deaths were 5,437, an excess of 616, or about 13 per cent. over the females.

The deaths specified in the record as consumption of the lungs, number 1,204; this gives one out of every 8½ deaths during the year, or nearly 12 per cent. There is an increase of mortality from this disease over the year 1851, of 35 per cent. The deaths from consumption for 1852, to population, were one to 90½.

The following table presents a comparison between the diseases which have been most fatal, hence most prevalent, for five consecutive years:—

	1848.	1849.	1850.	1851.	1852.
Cholera infantum	454	582	505	397	329
Consumption of the lungs	965	939	907	881	1204
Congestion of the brain	85	91	97	130	120
Convulsions	401	415	444	479	499
Croup	177	130	143	180	208
Debility	145	200	200	260	345
Diarrhoea	122	225	208	157	156
Dropsy of the brain	220	237	283	245	247
Dysentery	315	578	421	401	558
Scarlet fever	172	242	439	400	433
Inflammation of the brain	186	198	218	202	258
" " bronchiae	172	169	191	175	208
" " lungs	265	273	352	352	444
Marasmus	237	264	217	255	354
Old age	188	226	185	186	192
Smallpox	100	152	40	216	426

The following items, quoted from some of the periodicals of the day, are introduced merely for the information they embrace, and not for anything like the laudation of a particular sect that one of them might, by some, be supposed to contain; though there can be no doubt that, were the professed simple habits of that people strictly adhered to, not only by themselves, but by mankind at large, our bills of mortality would ere long present quite a different aspect, while the living in the mean time would be real-

izing the incalculable benefit arising from moderation and temperance.

Influence of Employments and Professions on Longevity.—Mr. Amasa Walker, Secretary of State of Massachusetts, has prepared a table of the vocations, as well as the ages, of several thousand persons who died between 1843 and 1850, showing the following results:—

Vocation.	Number.	Av. age at death.
Farmers,	4,974	63.83
Labourers,	2,283	45.39
Carpenters,	662	49.28
Shoemakers,	1,011	43.04
Merchants,	350	51.02
Professional men,	312	57.50

Review of the Weather in Philadelphia for September, 1853.

Days of month.	THERMOMETER.			WIND—COURSE AND FORCE.		REMARKS.
	Sunrise.	2 P.M.	Mean.	Sunrise.	2 P.M.	
1	72	84	78	S. S. W. 1	S. S. W. 1	Overcast, cloudy.
2	71	84	77½	N. E. 2	S. 1	Overcast, clear.
3	71	82	76½	S. by E. 2	S. by W. 1	Overcast, cloudy.
4	73	86	79½	S. 1	S. S. W. 1½	Rain night, fair, clear.
5	73	90	81½	S. by W. 2	S. W. 3	Cloudy, fair.
6	76	91	83½	S. S. W. 1	S. W. 3½	Cloudless (warmest night), clear.
7	74	88	81	S. S. W. 4	S. W. 4	Overcast, clear, thundershower 44 P. M.
8	64	76	70	N. W. 3	N. 3	Clear, fair, clear.
9	63	74	68½	N. 1	S. S. E. 2½	Clear, cloudy, rain 5 P. M.
10	63	70	66½	N. N. E. 3	N. N. W. 2	Rainy night and morning, clear P. M.
11	56	70	63	N. N. W. 1	N. W. 2½	Cloudless, fair.
12	56	66	61	N. 1½	calm	Fair, cloudy.
13	60	69	64½	S. W. 1	S. S. 1½	Cloudy, fair.
14	65	70	71½	S. by W. ½	S. by W. 3	Overcast, rain at 6 P. M.
15	66	77	71½	S. W. 5	W. by N. 5	Clear (rainy and windy night), rain.
16	64	79	71½	N. W. 3	N. W. 2½	Clear, cloudless.
17	64	81	72½	calm	S. W. 3	Foggy, clear.
18	70	83	76½	S. W. 1	S. W. 1	Overcast, clear.
19	70	84	77	S. ½	S. W. 3	Cloudless, clear.
20	74	72	73	S S. W. 2	N. W. 2	Fair, rain after 12 M.
21	61	74	67½	N. W. 3	N. W. 2½	Fair, clear.
22	60	72	66	N. W. 2	N. W. 3	Clear, fair.
23	58	70	64	N. N. W. 3	N. W. 3	Cloudy, clear.
24	57	73	65	S. W. 2	S. S. W. 4	Cloudless, clear.
25	58	68	63	N. 1	N. W. 1	Clear, cloudless.
26	55	70	62½	N. W. 2	S. W. 2	Fair, cloudless.
27	58	72	65	S. W. 1	S. W. 2	Cloudless, clear.
28	64	74	69	S. W. 2	S. W. 4	Fair, cloudy, rain 4 to 5½ P. M.
29	48	61	54½	N. W. 3	N. W. 4	Aurora in N.
30	44	59	51½	N. W. 1	S. W. 1	Cloudless, clear.
	63.60	75.56	69.58	1.9	2.4	Cloudless, cloudy.
						Monthly mean.

The temperature for September, like that of the preceding month, was unusually high. On eight days, the heat at mid-day was above 80, and twice at and above 90 degrees. The mean heat of the month rose to 69.58; the average temperature of the month being, for the last 60 years, 65.71. Twice only, in this lengthened period, has it been higher, viz.: in 1793 and 1804, in each of which years the mean temperature of September is recorded at 70 degrees. No frost has been witnessed in the city, though, doubtless, it was felt on the morning of the 30th, in the low grounds of the neighbouring country. The range of the thermometer for the month was

from 91 at noon of the 6th, to 44 on the morning of the 30th, or 47 degrees.

During the month, 20 days were without rain, and mostly clear; 3 were cloudy, or overcast; and on 7 days rain fell to the amount of 4.46 inches, as measured at the Pennsylvania Hospital.

The north east storm which is expected about the time of the autumnal equinox, and which usually begins in the latitude of the West Indies, and travels bodily up the Atlantic coast at the rate of some twelve miles an hour, was not this year experienced, though a storm of similar character swept with disastrous force along the coast, from

the 5th to the 9th of the month, and between the parallels of 33 and 40 north latitude, and between 60 and 86 degrees west longitude. Whoever reads the catalogue of marine disasters, as published in the daily papers for the two weeks following the storm, may have seen, by comparing time and place on his chart, the whole of this broad space of ocean dotted over by crippled ships, loss of cargo, loss of life, or other marine disasters. By a reference to our tabular record, it will be seen that the storm was not felt at Philadelphia. Again, on the 14th and 15th there was a heavy blow, causing several shipwrecks, and extending to the interior. In this city and vicinity, considerable damage was done to fruit and other trees, on the night of the 14th; and on the following day a "strong wind" (marked on our record 5) blew from the south-west, veering in the afternoon to north-west.

Among the other physical phenomena of the month may be named a thunderstorm on the afternoon of the 7th; an aurora borealis on the evening of the 28th; and the shock of an earthquake on the night of the 7th, in the eastern part of Massachusetts.

There was an unusual prevalence of westerly and southerly winds during the month, it being—

From W. a part or the whole of 27 days.

"	S.	"	20	"
"	N.	"	15	"
"	E.	"	4	"

—

Mortality on Board Emigrant Vessels.—

The mortality on board the emigrant vessels which have lately arrived at the New York Quarantine has been frightful, and should induce Congress to pass a law, in compliance with the memorial of the American Medical Association, requiring every emigrant ship to have a surgeon on board.

The following statistics are given of the arrivals and mortality between the 11th of September and the 14th of October last:—

Arrived.	Ships.	From	Pass.	D.	\$'k.
Sept. 11, Lucy Thompson	Liverpool	764	35	7	
Sept. 15, Niagara . . .	Liverpool	249	33		
Sept. 21, Charles Sprague	Bremen	350	45	12	
Sept. 26, Oder . . .	Hamburg	237	14	6	
Sept. 27, Winchester . . .	Liverpool	463	79	6	
Sept. 30, Tallyrand . . .	Hamburg	210	11		
Sept. 30, Louisiana . . .	Hamburg	142	3		
Oct. 14, Marmion . . .	Liverpool	295	34	2	
Total		2,740	259	33	

These deaths are supposed to have been nearly all caused by cholera, and it is said

to be certain that the thirty-three sick persons landed at quarantine were all attacked by that disease. It is also said that about one hundred cases of yellow fever have been treated at the quarantine hospital during the summer.

—

Harvey Demonstrating to Charles the First his Theory of the Circulation of the Blood.—We have received from Messrs. C. J. PRICE & CO., No. 7 Hart's Buildings, a splendid engraving, by G. Bellamy, from a painting by R. Hannah, of Harvey demonstrating to Charles the First his theory of the circulation of the blood from the heart of a deer.

The object of this work is, by furnishing a pictorial record of an incident in the life of a great man, to extend a knowledge of one of the most important discoveries in science, and to keep alive in the hearts of all who admire genius, gratitude to the memory of one of the greatest benefactors of mankind. The same services which Newton rendered to optics and astronomy, by his theories of light and gravitation, Harvey conferred upon anatomy and medicine, by his true doctrine of the circulation of the blood.

The picture represents Harvey's apartment in the palace. He is surrounded by the king and the young prince, courtiers, and some of Harvey's opponents in the medical faculty. The likeness of Harvey is taken from an excellent portrait by Cornelius Jansen, in the College of Physicians, London.

The price of the print is three dollars. Proofs after letter can be obtained for four dollars, and proofs before letter on India paper for five dollars.

The style in which this print is executed is highly creditable to the publisher, Mr. Geo S. Appleton, of New York.

FOREIGN INTELLIGENCE.

Laws of Cholera.—There are some important laws of cholera in relation to the seasons which are deserving attention.

The two former invasions of England by the epidemic occurred at the end of harvest, and extended their ravages till the close of the following years, running their course in each case in fifteen months. In every in-

stance the greatest amount of fatality in this country has been soon after the harvest. Without assuming any closer connection between the cholera and the wheat plant than there is between the Goodwin Sands and Tenterden steeple, we cannot withhold the remarkable passage in the cholera report which points out a very curious analogy in the histories of the plant and the epidemic. "The cholera in England kept pace in its development with the wheat plant, which took root in October, germinated in the winter, flowered in June, filled in July and August, was cut down by the reaper before the first week in September, when cholera was most ripe, and would have been dead ripe in October and in November, when cholera ceased." No descriptive observations will enable the reader so clearly to perceive the relation between the months of the year and the fluctuations of the epidemic as the inspection of the following table of

Deaths from Cholera in England during each month that the Epidemic reigned.

Months.	Deaths from Cholera in England.	Of the Total Deaths from Cholera the total per cent. in each month.	
1831-48.	1831-2.	1831-2.	1848-9.
October	354	.651	
November	97	.314	.691
December	282	.375	.689
1832-49.			
January	614	.658	1.210
February	708	.371	.289
March	1,519	.302	.4912
April	1,401	.107	.4530
May	748	.227	.2419
June	1,243	.2446	.4408
July	4,816	7,570	15.574
August	8,875	15,872	28,699
September	5,479	20,379	17,718
October	4,080	4,654	13,194
November	802	844	2,593
December	140	163	.453
Total	30,924	54,395	100.000
			100.000

In each of the years presented in the table, there was a gradual increase in the number of deaths from the period of the commencement of the epidemic. In 1831-32, this progress continued for five months, and then sunk down, so as to encourage the hope that it was dying away. In 1848-49, there was a similar gradual progress for four months. In the former case, the lowest point was reached in May; in the latter, in April. Then came the fresh eruptions, reaching their high numbers in August and

September; after which period the storms, having expended their fury, rapidly ceased. In the diagram, showing the relation of temperature to cholera from day to day, in 1849, the line of temperature fluctuates during January, February, March, and April, but without any rise; and, during the same months, as the above table shows, the cholera declines, dipping as low as only 107 in all England in the month of April. Then the temperature and the cholera both rise until August, when the heat attains its greatest height. Not so the cholera, which continues to mount with rapidity until September, when it shoots up to its highest point, after which it as rapidly descends. It would be wrong to infer, from this departure from the parallel between the temperature and the epidemic, that supposed relations were disproved. The radiating power of the sun in relation to us is greatest at midsummer, but our maximum heat is not reached until August; and we see a perfectly analogous case in the fact that the cholera reaches its culminating point some time after the temperature has made a corresponding advance.

Our experience hitherto shows a relation between the seasons in England and the intensity of the epidemic, which is more accurately represented by the Table than it could be described by any verbal expression. It would be no argument against this position, that, in other places, instances could be shown in which cholera raged in the cold season. We know that in St. Petersburg it has raged with great violence in the winter; and that in Scotland it existed during intense frost in January. Exceptional instances of this kind may perhaps be accounted for by local conditions, and may only assist to prove the rule, as perhaps is already done in the case of St. Petersburg, where the system of heating the dwellings may create, by artificial means, a condition perfectly analogous to our natural cholera harvest.

During the intense season of the last cholera invasion, much attention was directed to the atmospheric changes which were supposed to precede or accompany the various outbreaks. A discovery of the genesis of the epidemic was anticipated from observations on the electrical state of the atmosphere at St. Petersburg, where, indeed, the electricity appears to have been disturbed during the whole course of the

epidemic, being "so much diminished that the machines could not be charged." To make these phenomena available for the purpose they were intended, they should have been accompanied by evidence that such disturbance in the neighbourhood of St. Petersburg had not taken place before or since, and that similar phenomena were observed in many other places while the cholera was present. These phenomena were not general. There was no loss of power in the magnet at Hamburg, or at Berlin, where observations were made. In London, "the cholera quarter," the magnets were seldom disturbed, and, "the amount of electricity, though less than usual, seems to have diminished only in proportion to the less amount of humidity in the air."

There is, however, one observation in reference to the state of the atmosphere during the choleraic eras which is of great importance, and which corroborates the views we have taken of the agencies prevalent during these seasons. Mr. Glashier of the Royal Observatory, Greenwich, states that the horizontal movement of the air during the whole of this period was *only one-half of the usual amount*; that the period was distinguished by thick, stagnant atmosphere; that the air was, for the most part, very close and oppressive; and that, on some days, when there was a strong breeze blowing at the top of the Observatory, and over Blackheath, there was not the slightest motion in the air on the banks of the Thames.

This observation acquires increased importance from a comparison with the description given by Mr. Thom, of the atmosphere of Kurrachee some time before the dreadful outbreak of cholera in that town, when "the temperature was unusually high, the quantity of moisture in the atmosphere was greater than he had ever seen it before in any part of the world, and light, weak, and unsteady winds, or calms, had prevailed in the early part of June, instead of the strong, steady winds, and the overcast sky, for which June and July are remarkable in Kurrachee; and finally, there had been excessive rains. The people, as the result, suffered from languor and oppression, and inability to undergo the slightest fatigue without extreme exhaustion. For ten days before the outbreak of the epidemic, it was a common remark among

the old hands, that it was regular "cholera weather." The Report of the Board of Health, whence this account is extracted, adds, that "it is important to bear in mind that these physical conditions of the atmosphere which thus oppress the vital powers, are the very conditions under which noxious animal and vegetable refuse decompose with the greatest rapidity, and in which the products are carried in greatest quantity into the blood by the respiratory organs."

The inquiry which has been made into the mortality of cholera in England has, in the most satisfactory manner, shown that, *ceteris paribus*, there is a close and constant relationship of the epidemic to elevation. It has been observed, in a former paper in this series, that there is a close connection between the general health of this country and the distribution of cholera. Now, the tables of mortality in England show that, as a general rule, the mortality declines as we ascend rivers, and that the majority of healthy districts are at certain elevations above the sea.

The relation between the level of places and the strength of the cholera has been most carefully tested in the case of London, and the result has been the discovery of the mathematical correspondence between these two elements under consideration.

The districts of London have been classified according to their elevation above the level of the Thames. They are divided into those the elevation of which is not on an average above 20 feet, and at this level the deaths from cholera were 102 in every 10 000. In the second group, at from 20 to 40 feet elevation, the deaths in the same number were reduced to 65. In the third group, from 40 to 60 feet high, the numbers sank to 34 in 10,000. In the fifth group, with an elevation of from 80 to 100 feet, the deaths were but 22 in 10,000. In a district 100 feet high the mortality was 17; while at Hampstead, about 350 feet above the level of the Thames, the deaths were only 8, of which 1 resulted from infection brought from Wandsworth.

It was found, on farther examination of these facts, that the mortality from cholera on ground under 20 feet high being represented by 1, the relative mortality on each successive terrace is represented by one-half, one-third, one-fourth, one-fifth, one-sixth; so that the mortality from cholera,

at each successive elevation, is one-half, one third, one fourth, one-fifth, one-sixth of the mortality in the terrace immediately below it.

To do justice to Mr. Farr, by whom this law was discovered, and for the guidance of scientific inquirers, who may wish farther to understand and test it, it is necessary to add the following paragraph from his Report :—

" The elevation of the five terraces may be represented by 10, 30, 50, 70, 90 feet. The elevations of the two higher districts are 100 and 350 feet. It will be observed, that the mortality at 100 feet is 17; at 50 feet, 34 in 10,000; consequently, at half the elevation the mortality is doubled. The half of 50 is 25, and the double of the mortality 34 is 68. Now, observation gives 65 in 10,000 as the mortality at 30 feet of elevation. As the processes of dividing the elevation, and of multiplying the mortality by 2 may be carried on *ad infinitum*, it is evident that the mortality is not strictly in the inverse ratio of the heights of the soil."

We may add, however, that this inverse ratio is maintained as accurately as is requisite for the theory, bearing in mind the various modifying circumstances which must produce some little deviation from strict mathematical accuracy. For example, the advantages which are afforded to Hampstead by its elevation are somewhat diminished by the deficiency in the supply of good water; and the disadvantage of some lower levels is compensated by the better supply of water, and by the means and appliances secured by the wealth of the inhabitants.

In considering the law which is thus announced, it is scarcely necessary to observe that it must be always viewed in connection with the circumstances which may impede its operation. It is quite possible to convert the most elevated spots into unhealthy places, and render them sources of pestilence to the surrounding districts. Salisbury, Merthyr, Tydvil, Bilston, Newcastle-under Lyme, and St. Giles's, are on levels favourable to a healthy state, and have suffered purely from causes which it was within human power to prevent.—*Med. Times and Gaz.* Oct. 15, 1853.

Death from Chloroform—A case of death from the administration of chloroform oc-

curred last week in the Edinburgh Infirmary. Thanks to Heaven, it happened in the broad daylight of a public institution—where these things cannot be hid in a corner—and not in the private sick-room of a parturient lady, nor in the operating-chambers of some practising surgeon, in either of which cases it would doubtless have been smothered in oblivion.

The professor of clinical surgery would not cut a fistula in *ano*, however small the incision; would not apply the actual cautery, although he stoutly maintains the pain is so momentary it becomes inappreciable; nay, I fancy now, would not think of thrusting a bistoury into an abscess—and any one who has followed his practice knows how frequently these things occur—without first requesting a handkerchief and a phial of chloroform.

The Edinburgh medical press has done all in its power to proclaim the complete safety of chloroform; and if any fatal cases have occurred in this city, it has known also to bury them in silence, and has strained every nerve to invent some strange hypothesis, such as the adulteration of the drug, faulty mode of administration, etc., to account for the deaths from its employment that have happened in other places and countries, events which were quite to be anticipated in the natural course of things. Sometimes, however, unpleasant truths—simply because they are truths—become known in spite of all attempts to conceal them. Thus, in a late number of the recently deceased *Monthly Journal*, we have read a long account of some experiments with chloroform, written by a gentleman who had excellent opportunities of witnessing the private practice of Mr. Syme. If that paper has served no other good purpose, it has at least effected one—it has undeniably shown how very near the gates of death chloroform has led its victims.

Now for the facts of the actually fatal case: A stout, healthy young man, whose chances of a long life an insurance company would have been but too happy to accept, entered the operating theatre of the Royal Infirmary to have a stricture of the urethra dealt with according to the manner of Mr. Syme. (Remarkable coincidence!) The patient was laid upon a table, chloroform was begun to be administered, the patient struggled violently; however, by the help of dressers, clerks, and assistant-surgeons,

he was held close to the table, and the inhalation proceeded. The operation was about being commenced, the perineum had just been shaved, when a gentleman expressed some doubts as to the character of the radial pulse; another imagined to sound that of the posterior tibial artery, but he found the pulsations there quite distinct. Both continued, however, to keep their fingers applied. After a short pause, each almost simultaneously exclaimed, "It's stopped!" Startling announcement. Windows thrown open; tongue seized with artery forceps, drawn out of the mouth; chest squeezed; abdomen pressed upon; the electric battery made to work upon the thorax; cold water dashed upon the face and head; the trachea opened, a tube inserted, all in vain; life had deserted its tenement. It should be remarked, as an effect of the galvanism, respiration went on for some time, although the heart's action never recovered itself. The patient was carried to the dead-house. Two days afterwards, the body was examined; and, with the exception of a few old pleuritic adhesions, every organ presented the most exquisite specimen of health.

This case must necessarily suggest to every medical man many important reflections:—

1. It shows that chloroform is not so entirely innocuous, not so completely devoid of danger as the Edinburgh professors would have the world believe.

2. The insignificance of the operation. Indeed, Mr. Syme maintains, it is almost destitute of pain, never gives rise to hemorrhage, is exceedingly easy in execution. Is, then, the administration of chloroform warrantable in such a case?

3. Was the operation absolutely necessary? On this point the opinion of the profession is divided. However, now there can be no two opinions as to the preferable course of treatment. Far better, surely, to have a stricture remedied by the somewhat slower, but infinitely safer process, of dilation with bougies, than run the risk of the inhalation of chloroform for the purpose of having it divided, not to take into account the dangers inseparable from the operation itself.

4. The state of the pulse should be attended to, as betraying the first symptom of impending danger. This is in direct opposition to the oft repeated and published

advice of Mr. Syme: "We never attend, in this infirmary," says he, session after session, to his clinical pupils, "to the condition of the pulse while chloroform is being administered. If the ribs go on rising and falling, all is well." In this case we have an instance of the movements of respiration progressing fifteen minutes after the cessation of the heart's action. When that occurred, had death not truly supervened?

5. As to the mode of death, and the remedies employed. From tracheotomy having been performed, and artificial respiration attempted to be induced, we must infer the medical attendants imagined the patient was dying from asphyxia, and that most probably in consequence of a spasm of the glottis. Mistakes, in such emergencies, are excusable; but whoever, in asphyxia, or spasm of the glottis, ever saw the movements of respiration succeed one another so smoothly and so regularly; or even the process of respiration to continue after the stoppage of the circulation? To our mind, the case presented itself as one of mere syncope, dependent on the too strongly sedative influence of the anæsthetic on the nervous system, thereby influencing the action of the heart. If it had been treated on such pathological data, we think the chances of recovery might have been increased. The head should be lowered, the arms and legs elevated, so as to afford the proper stimulus, a sufficient quantity, to awaken the temporarily subdued energies of the nervous system. Ammonia applied to the nostrils, and the use of the other remedies suitable in cases of diminution of the *vis nervosa*.

May we not conclude, from the above, that chloroform should be reserved for certain cases only; cases which demand the annihilation of pain as a point of paramount importance, with a view either to the proper performance of an operation, or to the ultimate recovery of the patient. Let the Edinburgh professors modify their doctrine, and caution the medical student, that chloroform may sometimes prove fatal, and, therefore, should not be used indiscriminately.

Yours, SURGEON.

—*Med. Times and Gaz.* Oct. 15, 1853.

Upon the Evolution of the Teeth in Infants.—M. TROUSSEAU affirms that the period when the milk-teeth first appear through the gum is about the age of seven months and a half; and that they pursue the

following order: 1. The two inferior median incisors; 2. The four superior incisors; 3. The inferior lateral incisors, and the first four molars; 4. The four canine; 5. The last four molars. M. Troussseau persists in affirming that the canines appear after the first molars. In this point he is undoubtedly correct. The order of appearance of the teeth is governed by the wants of the animal throughout the mammalian class. The soft food first given to the infant requires cutting by the incisor teeth, then grinding by the molar teeth; but the digestive organs are not for some months fitted for the firmer kinds of food requiring laceration, for which the canine teeth are intended.—*Med. Times and Gaz.* Oct. 8, 1853.

Fracture of the Trochlea of the Humerus.—In the *Archives Générales de Médecine*, as quoted in the *Gazette Médicale* for April 16, M. LAUGIER describes a variety of fracture of the trochlea of the humerus. The following are its diagnostic signs:—

The fracture of the trochlea may be produced by a fall on the palm of the hand; it leaves the passive movements of the forearm entire: extension of the limb is accompanied by inclination inwards of the forearm on the arm at a very obtuse angle, the summit of which corresponds to the epitrochlea; in resisting this, there is an abnormal amount of transverse mobility, and distinct crepitus: the ulna is not displaced backwards or inwards: the olecranon is immovable on the ulna: the two condyles of the humerus are immovable, either on the bone, or on each other.—*Assoc. Med. Journ.*, Sept. 30.

Cholera in London.—It is stated in the latest No. of the *Medical Times and Gazette* (Oct. 15) which we have received that the cholera gives decided indications of a disposition to increase; in three previous weeks the fatal cases were 16, 29, 47; last week they rose to 66, of which 29 occurred to males, 37 to females. The majority of the deaths were among persons of middle age; 26 occurred under 15 years of age, 36 at 15 and under 60 years, 4 at 60 years and upwards. In the corresponding week of 1848, soon after the epidemic of that period made its appearance in London, the number of deaths from cholera was 30; in the corresponding week of 1849, when it was passing away, the number was 110.

The 66 cases of last week were thus divided over the metropolis: In the West Districts, 9 (pop. 376,427); in the North, 5 (pop. 490,396); in the Central, 2 (pop. 393,256); in the East, 8 (pop. 485,522); and on the South side of the Thames, 42 (pop. 616,635).

The Registrar General requests that medical informants inquire specially in all cases whether the attack of cholera commences by "diarrhoea;" and to state the interval of time in *hours* and *days* between the appearance of diarrhoea and the superintention of spasms, or of the other characteristic symptoms of cholera.

Cholera in the Provinces.—The following are the Board of Health returns of deaths from Cholera (c) and Diarrhoea (d):—

	Sept. 29	30	Oct. 1	2	3	4	5
	C. D.	C. D.	C. D.	C. D.	C. D.	C. D.	C. D.
Newcastle	29	5	20	4	11	1	1
Gateshead	7	0	6	0	5	1	8

Med. Times and Gaz. Oct. 8, 1853.

Cholera.—Copenhagen.—Intelligence of the 18th mentions only two cases of cholera, and no deaths.

Christiana.—On the 14th, numbers of cholera-sick were 89, and of dead 59; making a total of 1,693 cases, of which 1,079 have been fatal. Several other Norwegian towns are suffering in proportion.

Sweden is still enveloped by the disease. In Karlskrona, on the 13th, the deaths had reached 982, out of 1,823 sick. In Ystad, 339 sick had given 194 deaths. In Gothenburg, up to the 17th, 455 cases, and 239 deaths. The adjoining Majourna, 316 sick, and 128 dead. In Stockholm, on the 15th, there were 148 new cases of cholera, and 84 deaths; total, 3,016 cases, of which 1,698 have ended fatally. In Norkoping, on the 14th, the number of total cases was 1,077, and of deaths 353. While the epidemic is thus raging in Sweden, it would seem to have nearly disappeared in Finland.

Hamburg.—The cholera has been raging here now for eight weeks, but the epidemic appears sensibly to decrease. In the last three weeks, the proportion was 80, 72, 36 cases.

Odessa.—The cholera is prevalent and fatal at Odessa. Ten vessels from that port had, at the date of last advice, arrived off Constantinople, where they were put into quarantine.—*Med. Times and Gaz.*, Oct. 1, 1853.